



CDF Operations Report

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All Experimenters' Meeting



Stores summary

| Date | Store | Inst Lum (initial) | Int Lum (delivered) | Lum to tape (ϵ) | Physics Lum (ϵ) |
|---------|-------|-----------------------|------------------------|------------------------------|-------------------------------|
| Mo 7/28 | 2826 | 38.9e30 | 1507 | 1310 (86.9%) | 1310 (86.9%) |
| Tu 7/29 | 2828 | 39.4e30 | 1557 | 1256 (80.7%) | 1233 (79.2%) |
| We 7/30 | 2830 | 36.5e30 | 650 | 617 (95.0%) | 617 (95.0%) |
| Fr 8/1 | 2847 | 36.4e30 | 1277 | 1086 (85.1%) | 1063 (83.3%) |
| Su 8/3 | 2857 | 33.3e30 | 1345 | 1222 (90.9%) | 1196 (89.0%)* |
| Total | | | 6.3 pb ⁻¹ | 5.5 pb ⁻¹ (86.7%) | 5.4 pb ⁻¹ (85.5%)* |

*131 nb⁻¹ taken w/o silicon



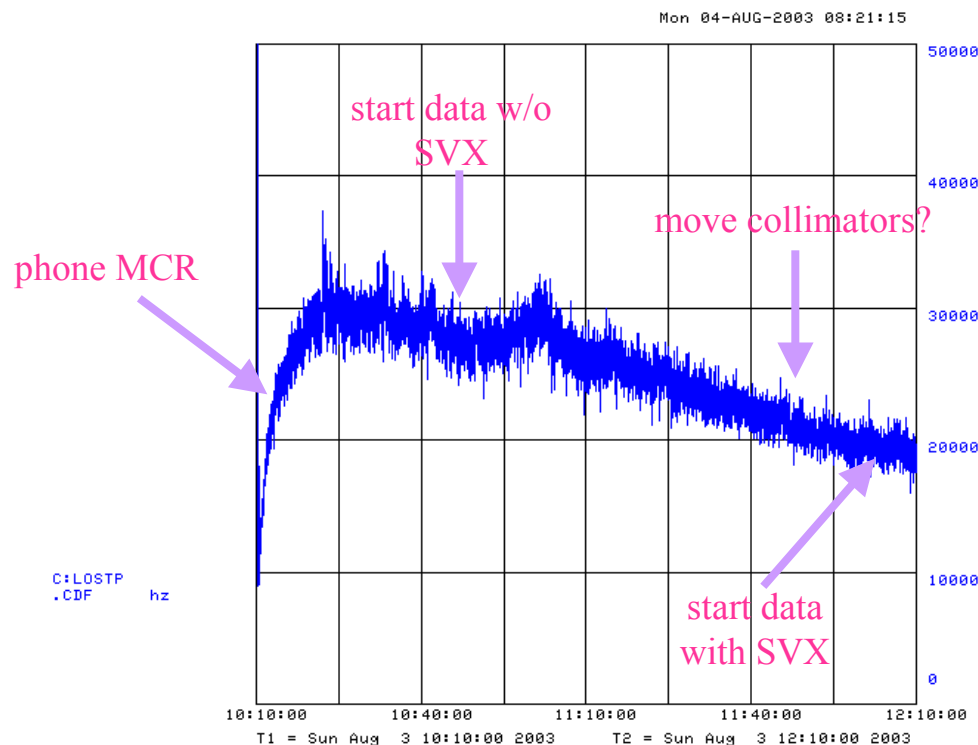
CDF down time

- Diagnosing strange L3 trigger rates (Tuesday)
 - Misbehaving triggers all had SVX tracking as a common thread, but the SVX data itself was a red herring
 - Tracked down to an incorrect beamline being used in L3
 - Better silicon tracking diagnostics in control room could've made this a 15-minute problem instead of several hours
 - Have stepped up efforts in this area
- Proton losses (real and otherwise)
 - Friday: C:LOSTP saturated at 100 kHz during and after scraping
 - Very likely due to a faulty transition board in loss monitor readout --- but “fixed” itself after ~ 1 hour
 - Sunday: real losses (next slide)



Losses --- Store 2857

- Proton losses quickly rose above 20 kHz after scraping
- Usually resolved fairly quickly with a tune change from ops
 - Not this time --- give up and start running w/o SVX
- MCR phones w/ proposal to move collimators in/out to reduce losses
 - Losses had almost decayed away to 20 kHz by that time anyway
 - Rather than risk losing store, CDF willing to ride out the losses for another 30 minutes





Conclusions

- 5.4 pb-1 for physics out of 6.3 pb-1 delivered this week
 - 86% efficiency
- Addressing the issues that cost efficiency this week
 - Better SVX tracking diagnostics
 - Rounded up spare parts for proton loss monitoring
- Detector in good shape, no access requests
 - Made use of access time that became available to fix SVX ladders, investigate PS for forward muon scintillators
- Polishing up our physics results for Lepton-Photon next week